Subject: Daily status report

End of Day Status Report May 27 2010 Walton Smith:

- Station WS4. 1 mile S of WS3 (0.5 mile S of WS2). CDOM signal is not as intense as WS2 but is broader than WS3; signals present from 860 to 1200m. Very different signature than WS2. Wire in@23:23 5/26; wire out @ 00:15. **NOTE:** *Casts 7-11 were done along a S/SW track 0.5 miles apart tracking this new plume feature.*

- Station WS5. Wire in @ 00:45 5/27; wire out @ 1:15; small blips in the O2 profile at various depths below 900m but nothing substantial; CDOM and trans signals increase starting at 900; again 3 layers appear to comprise the core of the plume.

- Station WS6. Wire in @ 01:56, out at 02:11; CDOM signal increase began around 900m; thin layer @ 1080m and a much bigger (5X) layer at 1240m. Some O2 depletion @ 1080m; bottom 150m looks normal and unimpacted.

- Station WS7. Wire in @ 03:00, out @ 03:25; CDOM signal increase began around 900m; thin layer @ 1080m and a much bigger (5X) layer at 1240m. Some O2 depletion @ 1080m; bottom 150m looks normal and unimpacted.

- Station WS8. Wire in @ 04:12, out @ 04:35; CDOM signal begins around 950m and while there are still 3-4 distinct layers, CDOM signals are much lower. There is O2 depletion at about 960m, 1080m, and 1120m (there's a blip at 1200m but it's small).

- Station WS9. Wire in @ 05:23, out @ 05:45; CDOM signal begins around 900m and the delineation of layers is less clear. A broad CDOM hump exists between 950m and 1150m and a sharp peak at 1260m that is coincident with a peak in trans. There are two negative O2 anamolies, one at 1080m and another at 1240m. Below 1260m, the profiles are flat and rather boring.

- Station WS10. Wire in @ 06:25, out @ 06:45; very different here: CDOM signal begins around 1060m and there are no distinct layers rather a broad CDOM hump between 1060m and 1200m. No deep, sharp CDOM/trans peak. O2 negative anamolies at 1060m and 1340m. There is no CDOM signal at 1340m so maybe that is due to methane?

- Station WS11. Wire in @ 7:15, out @ 8:15; very reduced CDOM but O2 anamoly is still present. The cast seems to have been chopped off at depth (stopped in the middle of a feature; Dennis was in control of this one)

- Station WS12. On returned to WS7 we inadvertently went 2 miles further out. W found a very impressive feature; wire in @ 08:55, out @ 09:50; very different here: CDOM signal begins to increase around 950m and there is broad CDOM hump between 950m and 1180m. There is one sharp CDOM/trans peak within this layer (around 1020m). O2 negative anamolies occur throughout this zone and are maximal at 1020m. There is another O2 depleted layer around 1280m but there is no CDOM peak here; methane oxidation?

- Station WS12. Second cast at site 12; wire in @ 10:30, out @ 11:25; Similar features; captured more of the dynamics of the depth profile.

- Station WS13. Wire in @ 1530; out@1610; not much profile in any of the sensor packages. Sampled for methane.

- Station WS14. Wire in @ 1900; wire out @ 2040; two low O2 features noted low in the water column; sampled for methane.

- Station WS15. Wire in @ 2030; wire out @ 2115; 1 mile S/SW of station WS14; no samples just sensors.

Summary of Attachments

1. Excel spreadsheet containing station specific information on samples.
2. Shape file of station locations which can be imported to mapping software.
3. pdf graphic based on shape file showing all stations (today's stations highlighted in blue).
4. CTD plots for today's stations.

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